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UNIVERSITY OF
SOUTH CAROLINA
College of Arts and Sciences

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Legacy

South Carolina Institute of Archaeology and Anthropology

Revisit of Excavations at Spanish Mount Point

By Karen Y. Smith



Figure 1: Nine decorated bone pins found during excavations in 2016 and 2017 at the Spanish Mount Point site at Edisto Island State Park. (Photo by Karen Y. Smith)

Thank you for your generous support of the Archaeological Research Trust (ART) Endowment Fund and the printing of *Legacy*. Please send donations in the enclosed envelope to Nena Powell Rice USC/SCIAA, 1321 Pendleton Street, Columbia, SC 29208, indicating whether you want to continue receiving *Legacy* and include your email address. All contributions are appreciated. Please visit our website at: <http://www.artsandsciences.sc.edu/sciaa> to download past issues, and let the Editor know if you wish to receive *Legacy* by email.

Thank You! Nena Powell Rice, Editor,
(803) 576-6573 Office, (nrice@sc.edu).

The excavation units have been backfilled, but the real work (and fun) are just beginning! Seven total field weeks and 100s of volunteer hours have given us plenty of material to analyze: from oysters and marsh snails to pottery and decorated bone pins to optically-stimulated luminescence (OSL) and radiocarbon

samples. With this, we are equipped to answer some key questions about the formation of the shell mound. It is exciting to enter this phase of the project, when we can truly begin to start putting the pieces of this 4,000 year-old puzzle together again. (Stay tuned for an article in the December 2017 *Legacy*)

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Director's Notes

By Steven D. Smith

During the month of May 2017, I directed a field school at the Ninety Six National Historic Site at Ninety Six, South Carolina. This effort was funded as part of a grant from the National Park Service. The grant covers the field school (Anthropology 322, *Field Methods in Archaeology*) and an assistantship for a Ph.d. graduate student in the University of South Carolina, Department of Anthropology, who will focus on a topic related to the archaeology of the Southern Campaigns of the American Revolution. Mr. Brian Mabelitini will enter the department this fall under this program.

Five undergraduates from USC took the three week field school along with a sixth undergraduate from North Greenville University. We also were fortunate to have the assistance of a host of volunteers, including NPS personnel.

The site we investigated was the Robert Gouedy Trading Post established at Ninety Six around 1751. In 1759-1761, the post was occupied by South Carolina militia, fortified with a stockade, and expanded during two campaigns against

the Cherokee Nation. Twice the Cherokees attacked the fort. By the time of American Revolution, the site was probably abandoned, as the town of Ninety Six was established about a half mile north of the post.

We began the first week with remote sensing. Jon Leader taught the students to use the gradiometer, and I had them in the woods using metal detectors. During the second and third week, they learned to use a total station transit, a GPS instrument, and dig formal excavation units the old fashion way, using shovels and trowels.

Our research goal was to find the fort's stockade ditch and follow it to reveal the entire outline of the fort. The site consisted of an open grassy knoll surrounded by a light forest. Stan South first investigated Gouedy's post in 1970 and had found a corner of the fort's stockade ditch. We were able to relocate his reference points so as to tie in his excavations with ours. We could also see his old excavation units. To save time, we decided our first task would be reopening his old units to reveal the corner Stan had found. From there we could spend the next two weeks following the ditch.

That seemed like a good idea at the time. We placed a 1 X 2-meter unit in one of Stan's old unit depressions and found... nothing? Maybe we were off a bit. So we expanded our unit to find...more nothing! Hmmm. We decided to step back and rethink the whole idea. Tamara Wilson re-drew Stan's map to scale on graph paper and then using that grid, we laid out his corner unit on the ground using chaining pins. We were right where Stan was, no doubt. Another unit was dug and again, nothing found. At this point, the students were mumbling about the merits of summer school versus the beach. I called back to the Institute and asked Sharon Pekrul, our curator, to pull Stan's old slides of his excavations. Upon another look at



Figure 1: Heathley Johnson with muzzle of swivel gun he found. (Courtesy of Sam Clyburn)



Figure 2: USC field school students and volunteers excavating features at Ninety-Six. (Courtesy of Sam Clyburn)

his photos, it became evident that what Stan found was just a shadow of a ditch, not a clearly defined, deep ditch. Between Stan's notes, a few more excavation units, and an interview with long-time NPS Ranger Grey Wood, it became clear that prior to the creation of the National Park, Gouedy's Post had been logged and bulldozed. The top of the site had been scraped away into the surrounding woods where push piles further confirmed the damages to the site. Today, the topsoil is only 10 centimeters deep in many places, and what was left of the ditch, consisted of only one to two centimeters of fill. Once we realized that, we excavated down to the interface of the subsoils very carefully, and eventually found vague evidence of the ditch in new units. Fortunately, we found two large features full of animal bone, brick, and a few 18th century ceramics.

Metal detecting in the woods around the site found a moderate selection of metal items typically associated with a trading post and an 18th-century battlefield, including lead shot, gun parts, and most exciting, two pieces of a swivel gun. Overall the field school was a success, as the students gained experience in basic field techniques. The NPS Rangers were

fantastic hosts, providing wheelbarrows, awnings, and volunteer help (even when not much was found in the screens). We hope to return next year.

This issue of *Legacy* finds us saying goodbye to another esteemed colleague, Joe Beatty, who is retiring at the end

of June 2017. Jim Spirek has written a tribute. Losing Joe is going to hurt. Joe was the ultimate 'utility' player on team SCIAA. He could play any position and was always happy to help anywhere. We will work hard to find someone to fill Joe's slot, but he won't be replaced—he is too unique. We hope to entice him to volunteer a lot.



Figure 3: Dropped lead shot from Gouedy's Post. (Courtesy of Sam Clyburn)



Figure 4: 2017 Ninety Six field school. Top Row, (left to right): Colin Shields, Steve Smith, Austen Monzel, Brian Mabelitini, Josh Chaplin. Bottom row, (left to right): Ariel Norris, Lakisha Belizaire, Samantha Clyburn. (SCIAA photo)

Maritime Research Division

Unloading Loaded Cannons Jettisoned from the CSS *Pee Dee*

By James Spirek and Jonathan Leader

Screech, scratch, screech, scratch! The annoying sounds, much like the sound of finger nails drawn across a chalkboard, emanated from the speakers as we watched intently the downloaded video footage on the computer screen. The video camera, mounted on an iron conduit pipe along with an underwater flashlight, slowly pushed through the muzzle of the IX-inch Dahlgren smoothbore lying on the bottom of the Great Pee Dee River. The bore, cleared of sand, mud, mussel shells, leaves and twigs, rasped the pipe as the camera methodically moved towards the powder chamber. The video revealed the inside of the tube, flushed with clear tap water from a hose connected to a spigot on the adjacent property, had minimal corrosion buildup despite lying on the river bottom for over 150 years. Scraping along the bottom of the bore, the camera pressed through leftover sand deposits, broken bits of mussel shells, twigs and swirling leaves, moving ever closer towards the answer to an important question: Was the gun loaded?

Uncertainty on whether the Dahlgren and the Brooke rifles were loaded or not prompted our efforts to examine the bores of each of the cannons lying on the bottom of the river. Although local lore believed the cannons were spiked, the historical record proved inconclusive on the matter. To determine if the bore lengths matched their historical dimensions, we cleaned out the bores of the two cannons discovered first: the IX-inch Dahlgren and the supposed VI.4-inch Brooke rifle. Suctioning out the accumulated sediments and organics in the IX-inch, we inserted a length of PVC pipe down the bore. Marking the intersection at the pipe and muzzle, we removed the pipe and measured the distance between the mark and the bottom—83 inches; the historical length of the bore was 107 inches. Subtracting the two measurements indicated the possibility of an obstruction in the bore. Repeating the same procedure at the supposed VI.4 inch rifle, the resulting measurement complemented the historical



Figure 2: Example of strapped and sabotted IX-inch shell. (In *Field Artillery Projectiles of the American Civil War*, Dickey and George 1993:356)

bore length, or 116 inches, suggesting the bore was free of an obstruction. When the supposed VII-inch rifle was discovered and examined, we again repeated the same procedure as with the other two. The bore measured 102 inches, while the historical length was between 130-136 inches. Again subtracting the two measurements revealed the likelihood of an obstruction. As the reader may surmise, obstruction was a euphemism for loaded. The bore measurements suggested that two of the three tubes appeared loaded.

To determine visually if the guns were indeed loaded or spiked, we again thoroughly cleaned the bore of each cannon of river debris with a suction dredge. Then we placed a garden hose inside to infuse the tube with clear freshwater, cut the spigot off after a while and waited a bit for things to settle down inside the bore. Next we inserted the pipe-mounted video camera and light into the bore and pushed until impeded by the back of the cannon or the obstruction. We backed the camera off a bit and then



Figure 1: Bronze fuse of IX-inch shell inside Dahlgren smoothbore. (SCIAA image)

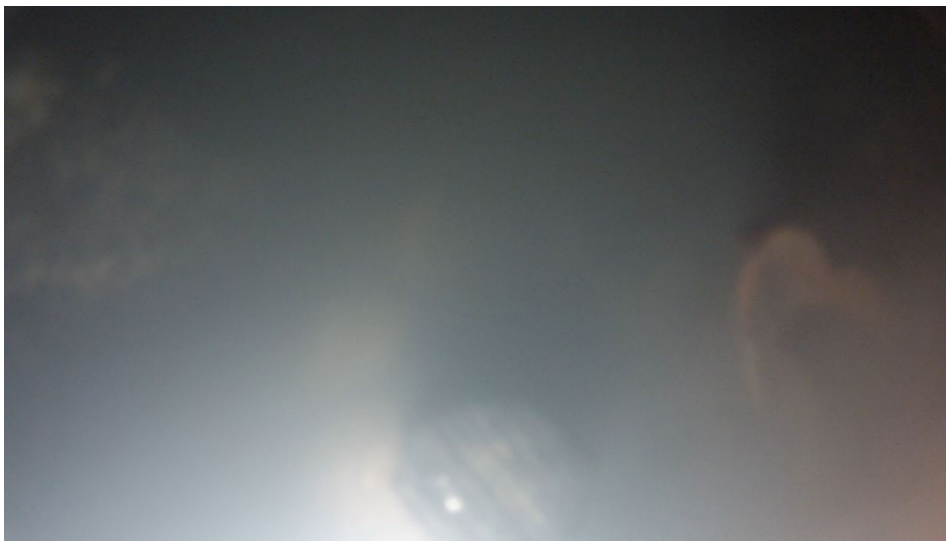


Figure 3: Supposed nut attaching copper sabot to shell inside the supposed VII-inch Brooke rifle. (SCIAA image)

moved the pipe around to ensure good imagery of the bore's interior.

Back at the office we downloaded the video files, turned the volume down from the scratching sounds, and watched the inside of the IX-inch smoothbore fill the screen as the camera moved towards the obstruction. Soon a shiny object appeared out of the darkness—a bronze fuse. Moving the camera in a circular direction revealed the outline of a round shell with remnants of four tin straps protruding between the shell and the bore wall (Figure 1). These four straps, nailed to a wooden sabot behind the shell, once joined at a now missing tin disk that encircled the fuse. The tin strapping kept the ball and sabot together during transport and when loading the cannon (Figure 2). Unfortunately, the operation to inspect the supposed VI.4-inch was stymied by the size of the video camera and the flashlight, which coupled with the smaller muzzle diameter, precluded inserting the ensemble to determine the presence of a projectile in the bore. As noted above, the measurement of this bore corresponded to the historical dimension, and therefore we felt confident that the gun was not loaded. When the supposed VII-inch was finally discovered, we repeated the bore inspecting procedure and filmed the interior of the cannon. As the camera moved towards the back of the Brooke rifle, we observed the lands and grooves of the rifling until finally hitting an obstruction. Carefully reviewing

the image seemed to reveal a nut. As we interpreted the view then, it appeared that we were looking at a backwards inserted Brooke shell, with the copper

sabot secured to the base of the shell by the nut (Figure 3). In other words, not only was the cannon loaded but also it appeared spiked. When negotiating with the Warren Lasch Conservation Center to treat the three recovered cannons, the conservators had adamantly stated they must be free of any projectiles prior to arrival at the facility. Discovering that two of the cannons appeared loaded, we held a meeting with the conservators to discuss our predicament and to suggest methods to extract the shells from the cannons. The lead *Hunley* conservator had experience removing a shell from one of the cannons recovered from the CSS *Alabama* sunk off Cherbourg, France. That heavily corroded cannon had required great effort to remove successfully the round shell from the cannon. Fortunately, the CSS *Pee Dee* cannons had very limited interior corrosion build-up to impede



Figure 4: IX-inch shell removed from Dahlgren. (Courtesy Chad Butler)



Figure 5: Looking down bore of VI.4 Brooke rifle revealing grapeshot stand after grapeshot removed (SCIAA image)

any shell extraction. Next, we turned to a person who had successfully extracted a shell from one of the CSS *Georgia's* cannons recovered from the Savannah River, as well as from other Civil War cannons. His method consisted of flooding the bore with water and then remotely drilling into the shell, tapping and threading a bolt into the projectile, and then slowly withdrawing the shell from the bore. Actually, Jon Leader had used this approach and other methods to disarm four spiked 10-lb Confederate Parrot rifles discovered buried in Chester, SC back in the late 1980s. We decided on this tactic to extract the shell from the Brooke rifle. To remove the IX-inch shell, we decided on another method inspired by the historical means a gun crew used to extract a round ball from a smoothbore cannon—a ladle.

When we reviewed the imagery from the IX-inch cannon, we observed a significant amount of windage, or gap, between the ball and the bore. That distance, about a quarter inch, would perhaps allow us to insert a ladle under the ball and then to extract it. This was the historical means of removing an unfired ball from a smoothbore cannon as described in Civil War naval ordnance manuals. We conducted research on the

internet for illustrations of contemporary examples and learned that a copper ladle for a XI-inch Dahlgren smoothbore was recovered from the turret of the USS *Monitor*. The lead conservator at the USS *Monitor* Center in Newport News, VA graciously forwarded to us the archaeological drawings of the recovered ladle. Plans in hand, we constructed a similar ladle using a 10-foot iron pipe and at one end attached a wooden disk, about 8-3/4 inches in diameter, partially encircled along the edge with tin flashing. This essentially formed a scoop that we intended to insert inside the bore, underneath the ball and to slowly withdraw the projectile. We practiced the operation on dryland using an 8-inch Columbiad shell against a wall and on a concrete floor. Pushing the ladle firmly against the ball caused a little bit of flex in the tin flashing, but a second later the ball rolled nicely into the scoop and remained there as we drew the ladle back towards our position. The proof of concept seemed to bode well for our success in extracting the ball from the cannon. Concerning the supposed VII-inch gun, we arranged to work with one of Jon's volunteers, an expert machinist, who had assisted him on disarming the Chester cannons to fashion

the extraction contraption for us.

We started the extraction operations on the IX-inch smoothbore. During the previous ventures, we had used a video camera with the footage only reviewable after we returned topsides to check on our bore cleaning efforts. This time we wanted real-time imagery which Bob Butler, a member of the CSS *Pee Dee* Research and Recovery Team, provided with an underwater infrared camera and topsides monitor to oversee the bore cleaning results and the extraction process. Using our AGA full-faced masks equipped with radio communications permitted the underwater archaeologists to talk to the surface support team who would guide the cleaning and extracting operations. The first part of the plan called for a thorough cleaning of the bore of debris and deposits of corrosion. We used a suction dredge and a water-pressure hose and alternated sucking and spraying the bore walls and around the ball. We are especially concerned about the area where the ball rested on and touched the bore. Repeated insertions of the infrared camera and instructions from topsides on areas needing a bit more cleaning finally got the bore and ball freed of visible debris and potential snags. Bob had also devised a metal wedge attached to a long iron fence pole that we used to push under and around the ball. Probing and prodding the wedge around the ball finally succeeded in moving the ball in the bore, confirmed by the fact the fuse had rotated away from the view of the camera. The ball now actually sat on the wedge, and we carefully attempted to extract the ball, but it wouldn't roll off—so tantalizingly close. Once again we suctioned and sprayed the interior of the bore to remove any debris loosened during the wedging procedures. Again we inserted the wedge in the bore and under the ball much easier this time. We cleaned the bore one more time and then inserted the ladle to extract the ball. The ladle proved a bit cumbersome in the water, especially in maneuvering the long pole in the river current. Finally, the pole got level with the cannon bore and we pushed down towards the ball. We

could feel the flashing give a little against the ball, but unlike at the office, the ladle could not get underneath the ball and kept binding against one area that eventually crumpled the flashing. Repeated efforts with the ladle, including additional cleaning and spraying, failed to scoop up and extract the ball.

Unfortunately, the proof of concept gave way to “the proof is in the pudding,” and although thwarted, we instead took solace in knowing that we had loosened and rotated the ball in the bore. Our back-up plan called for us to invert the cannon during the recovery operations by which we believed the freed ball would easily roll down the bore and into our hands. Then we could easily remove the wooden sabot and any remaining items, such as the powder bags. Accounting the IX-inch shell sufficiently extractable, we turned our thoughts to the supposed VII-inch dilemma. In consultation with our partners, we decided to delay extracting that shell until we intended to recover the cannons.

In late September 2015, we returned to the former Mars Bluff Navy Yard waterfront to recover the three cannons in a two-step process—a week of prepping and then Lift-Day (See *Legacy*, Vol 19, No. 2, December 2015:4-9 for more details about the recovery of the cannons). During prep week we intended to strap each cannon, move the supposed VII-inch closer to the river bank, and to unload the two loaded cannons. After strapping the IX-inch Dahlgren and cleaning the bore again, we lifted the cannon and placed it against the river bank with the muzzle pointing down. As expected, and with a little persuasion with the wedge, the ball rolled down the bore and into our waiting hands (Figure 4). That cannon was now unloaded and one more to go, or so we thought. When we strapped and relocated the supposed VII-inch closer to shore, a review of the markings on the trunnions read “VI” and not “VII” as expected. That meant for all those years searching for the VII-inch was actually a search for the VI.4-inch, and that meant revising the bore depth for the formerly identified

and smaller VI.4-inch rifle that actually was the larger VII-inch rifle. Subtracting the measurement obtained earlier from the historical bore length of a VII-inch revealed an obstruction was likely present, and that we had three loaded guns on our hands.

The plan to extract the Brooke shells consisted of moving each rifle alongside the riverbank, muzzle up, and at an angle to advantageously situate the extraction apparatus. Prior to that, we oriented each rifle muzzle down towards the river to flush them of sediments and debris. Spraying with the pressure washer also smoothed the interior to prevent any corrosion from causing the supposed shells from hanging up while moving up the bore. As we flushed out the VI.4-inch bore, a round object suddenly escaped from the muzzle and splashed into the river. Believing the object was a large nut, perhaps a black walnut, Jim Spirek quickly reached down to grab the item before it disappeared on the river bottom. Instead of a tree nut, the object was a small iron ball. Curtailing the cleaning operations, a flashlight pointed up the bore revealed several small balls, arrayed around a central iron post, concreted to each other and the bore wall. Instead of a shell lodged

in the bore, we had a stand of grapeshot loaded in the rifle. We grabbed the wedge and carefully began to dislodge each of the balls and to catch them in a bucket as they descended down the bore. After dislodging 11-grapeshots, we wedged around to loosen the stand and succeeded in lassoing the post with a line and then drawing it out from the bore (Figures 5 and 6). Fragments of the quilt fabric covering the grapeshot and the powder bag washed down the tube. Emptied of its contents, the VI.4-inch was declared unloaded. After positioning the real VII-inch against the riverbank, we again flushed the bore and stuck the flashlight in hoping to find grapeshot rather than a shell. Luckily, the cannon was loaded with grapeshot like the VI.4-inch. Again using the wedge, we carefully extracted the individual balls from the bore. A build-up of corrosion and sediment for several feet from the muzzle down the bore proved an insurmountable hurdle to retrieving the grapeshot stand from the rifle. The stand was subsequently recovered, along with fragments of canvas covering and the powder bag, by WLCC conservators after removing these corrosion products from the bore. All three cannons were now unloaded and ready for recovery and delivery to the laboratory in



Figure 6: Recovered grape stand from VI.4-inch Brooke. Note remnants of the powder bag adhering to the base plate of the grape stand. (SCIAA image)



Figure 7: Individual grapeshot at the conservation facility. (WLCC image)

North Charleston.

All the recovered projectiles and associated elements, comprised of metal, textiles, and wood, are undergoing conservation at the WLCC laboratory (Figure 7). Originally, the quilted grape stand consisted of an iron plate and an upright spindle, around which the balls were arranged and held together by a canvas bag, tied and secured at the plate and quilted onto the balls by a strong twine, and wrapped closed at the top of the spindle (Figure 8). Surviving components from the Brooke grapeshot projectiles included the iron grape shots, 11 from the VI.4-inch and 12 from the VII-inch, the iron stand, and portions of the canvas bag. Adhering to the bases of the grape shot stands were remnants of the powder bag, along with gunpowder residues. Components recovered from the inerted, iron IX-inch shell included the wooden sabot, tin strap fragments, and the

gunpowder bag and residual gunpowder. Additionally, preserved were the bronze fuse and flushed gunpowder. Once their treatments are completed, the conserved projectiles and associated artifacts will form part of an exhibit about the three cannons at the Florence County Museum.

On board the CSS *Pee Dee*, the three loaded cannons would have made the gunboat a formidable weapon to contest Union naval supremacy along the coast and high seas. The only combat mission undertaken by the gunboat occurred when ordered to Cheraw, the head of navigation about 65 miles upstream, to provide cover for withdrawing Confederate forces. Years after the war, W.F. Clayton, a former Passed Midshipman aboard the gunboat, recollected that in early March 1865 the gunboat proceeded from Mars Bluff, grounded at Cashua Ferry for several hours, and arrived at the town the next evening. The gunboat remained

at the town until the Confederate rear-guard withdrew over the bridge, which was burned. The gunboat then returned to Mars Bluff. Union forces captured Cheraw on March 3, 1865 after artillery barrages hastened remaining Confederate troops from the town and over the river. One Union officer reported learning the gunboat was near the town the evening of March 2, but inexplicably was not present the next day to cover the last of the withdrawing Confederate forces; perhaps the captain felt the gunboat was in a vulnerable position in the narrow and shallow river to contend against mobile and shore-based artillery and prudently withdrew to Mars Bluff Navy Yard.

The type and effect of the projectiles in the three cannons provided insight to the anticipated engagement at Cheraw, an urban environment, between the Confederate gunboat and Union forces composed of infantry, cavalry, and artillery.

The Brooke rifles, each loaded with a stand of quilted grapeshot, and the Dahlgren smoothbore loaded with a shell offered varying effects upon an enemy. In a naval action, grape proved useful in close ship to ship actions to sweep through gun ports, rigging, and capable of causing damage to lighter upper works. For maximum effect, firing grape at exposed men on a man of war varied from 200-300 yards, and against a mass of men about 400 yards. At that last range the 12-balls dispersed about one-tenth that distance, or in a grouping around 40 yards. The shell, on the other hand, could penetrate hull structure or

burst over a deck and in either case cause extensive damage to a ship and its crew. A IX-inch shell with the following variables: weight approximately 72-pounds, 10-pound powder charge, 10 feet above the plane, elevated at four degrees, a five-second fuse, had an approximate range of 1,520 yards.

The two projectile varieties offered different effects upon land troops in the town setting at Cheraw. Grape, capable of piercing structures, suggested an intent to blast the projectile at close range, going through lightly built structures, that is, homes, stores, sheds, and fences, and

open areas to reach clusters or masses of exposed or covered troops in the town. A shell burst, at point blank range or pitched further afield, was another effective means to reach clusters and masses of exposed or covered men at a much further distance than grapeshot. The combination of these projectiles, if fired, would no doubt have retarded the advance of Union troops moving into Cheraw by inflicting heavy casualties, thereby buying additional time for the Confederate forces to withdraw over the Great Pee Dee River. The firing of these three large guns would have proven lethal to advancing Union troops, but there was also presumed restraint on the part of the Confederate gunners unwilling to inflict civilian casualties and property damages by firing at will in and over the town. Much like when the IX-inch Dahlgren, aboard the USS *Southfield*, remained silent as the captain, fearing friendly fire casualties, ordered a cautious return fire during a Confederate attack on Plymouth, N.C. on the night of December 10, 1863 (see *Legacy*, Vol. 20, No. 1 July 2016:27-28). Jettisoned overboard, the three loaded guns bore mute testimony to the unfilled mission for the gunboat to contest and sweep the Union navy from southern waters and to venture further afield to disrupt Northern maritime trade.

The authors wish to thank the following individuals and organizations for their assistance during this phase of the CSS *Pee Dee* cannon recovery project: Ted and Connie Gragg, Bob and Chad Butler, CSS *Pee Dee* Research and Recovery Team; Glenn Dutton and Rufus Perdue, Long Bay Salvage, Inc.; David and Cody Freeman, Palmetto Scuba Connections; David Krop, director, USS *Monitor* Center; Dr. Stéphanie Cretté, director, Paul Mardikian, Virginie Ternisien, and Johanna Rivera-Diaz, conservators, Warren Lasch Conservation Center; Allen Frye, USC Mechanical Prototype Facility; Susan Lowe, Susan Davis, Business Office, SCIAA; and Ashley Deming, Joe Beatty, Nate Fulmer, Jessica Irwin, and Dan Brown, Maritime Research Division staff at SCIAA.



Figure 8: Example of quilted grapeshot stand (Courtesy Ridgeway Civil War Research Center)

The Dorchester Waterfront Report

By Drew Ruddy

Probably the first underwater investigation of South Carolina's historical heritage was conducted in 1960 in the Ashley River at the site of the Dorchester colonial waterfront. Navy divers from Explosive Ordnance Disposal (E.O.D.) Team 2 stationed in Charleston searched the river bottom under the direction of Dr. Lawrence Lee, history professor at the Citadel. In the following few years, some of South Carolina's first SCUBA divers arrived at the site and began to collect historic artifacts. In the mid-1960s, some of the first divers had no formal instruction or certification; there were no instructors. Some wore tanks fashioned from surplus CO2 bottles. Air fills were obtained from the local welding supply shop; there were no dive shops. Artifacts representing the rich history of the 18th century Dorchester township were recovered and taken home as trophies by South Carolina's first black water SCUBA divers. In the mid-1970s, South Carolina hired Alan Albright as the first state underwater archaeologist. Eliciting the volunteer efforts of the then active SCUBA Charleston Diving Club, Albright did one of his first official underwater surveys at the Dorchester site, 38DR3. In 1976, he returned with a



Figure 2: 18th-century onion bottle from the Dorchester Waterfront. (SCADP image)

team led by his assistant, Ralph Wilbanks, and conducted more intense excavation methods using air lift equipment.

The colonial town was established in the late 1690s, when a group of New England Congregationalists originating in Dorchester, Massachusetts migrated to South Carolina to settle on the banks of the

Ashley River. Many of the settlers lived on larger farm lots outside of the Dorchester village, but the town that developed at the headwaters of the Ashley River became a center of commerce for much of the 18th century. In the 1750s, desirous of obtaining more room to expand while still maintaining their concept of the New England style community, most of the Congregationalist families migrated to Sunbury, Georgia. During the American Revolution, both the American and British armies intermittently occupied Dorchester. In the 19th century, with the rise of the nearby Summerville community, Dorchester faded into obscurity. The site of the colonial town was designated as Colonial Dorchester State Historic Site in the 1960s.

Recognizing the importance of colonial Dorchester in the story of South Carolina, the South Carolina Artifact Documentation Project (SCADP) has just completed a yearlong project of writing a report on the history of the town and on the pioneer underwater archaeology at this site. Going back in time to a period of over 50 years ago, anecdotal information was obtained



Figure 1: Remnants of the once active 18th-century Baker's Wharf on the Dorchester Waterfront. (SCADP image)



Figure 3: 18th-century pewter measure recovered by an avocational diver in the mid-1960s. (SCIAA image)

through interviews with several of the first divers. Photographs and field notes were obtained from the SCIAA archives, which helped to recount the details of the 1974 and 1976 projects.

Extensive assistance was provided by SCIAA and SC Department of Parks, Recreation and Tourism staff by allowing the SCADP team to photograph large collections of artifacts in their curation obtained from the underwater projects. State Parks historian Dan Bell graciously shared photos of the colonial wharfs taken over the past several decades. SCADP research associate William R. "Billy" Judd also shared his professional drawings of the colonial wharfs. In June 2016, Ralph Wilbanks, now a private underwater archaeological contractor, aided the documentation work by conducting a magnetometer and side scan sonar

remote sensing survey of the Dorchester waterfront.

The Dorchester Waterfront Report by the SCADP is an effort to recount some of the rich history of the Dorchester Colonial site. It also attempts to back track over a 50-year period to preserve archaeological information gained from the hobby divers and early SCIAA projects that otherwise may have been lost. It is the hope of the SCADP that this information may be helpful to researchers of the future.

The Dorchester Waterfront Report is available for viewing and downloading on the University of South Carolina Scholar Commons site (http://scholarcommons.sc.edu/mrd_pubs/11/). For more information, the South Carolina Artifact Documentation Project may be contacted at scartdocpro@aol.com.



Figure 4: The Dorchester Waterfront Report being presented to Ashley Chapman, Colonial Dorchester State Historic Park Archaeologist by the South Carolina Artifact Documentation Project. (left to right): Steve Howard, SCADP; Ashley Chapman, SCPRT; and Drew Ruddy, SCADP. (SCADP image)

Retirement of Joseph M. Beatty, III

By James Spirek

Everyday about 10,000 people retire in the U.S., but on Thursday, June 29th, we are only interested in one person who will become a retiree after 39 years of public service at USC and SCIAA—Joseph M. Beatty, III. Joe was initially employed at USC in 1978, where he worked at the Motor Pool assisting in vehicle management. He also drove the bus for the Gamecock football team to practices, home games, and to and from the airport for away games. It was at the Motor Pool that Joe first interacted with staff of SCIAA, including the first state underwater archaeologist, Alan Albright, and other early Maritime Research Division (MRD) members. Learning of an employment opportunity at the MRD in the early 1980s, Joe, already a seasoned diver, applied for and was ultimately hired as an underwater archaeological technician. Over the years Joe's role evolved and expanded to include a variety of duties as equipment manager, master diver, hobby license administrator,



Figure 1: Master Diver Joseph M. Beatty, III (Photo by Darryl Miller)



Figure 2: Joe and Jim Spirek holding oyster-encrusted iron bar at Station Creek, Port Royal Sound. (SCIAA image)

public notices reviewer, and researcher wedged between many other tasks. He also ably served as project cook for special occasions, typically whipping together a batch of his famous Lowcountry Boil.

Joe participated in numerous projects to advance the MRD mission to study and preserve the maritime archaeological legacy in the rivers, lakes, and coastal waters of South Carolina. Notable projects during his career included the Little Landing Shipwrecks—recording two Revolutionary War-era vessels burned and sunk in the Cooper River; the Allendale Prehistoric Chert Quarry—where he and other MRD staff ensured a near non-stop conveyance of chert debitage and points by the bucket loads to the delight of Al Goodyear's volunteers; the Mars Bluff Navy Yard—where he assisted in the investigations along the waterfront, which culminated in the recovery of the three cannons jettisoned into the Great Pee Dee River by the CSS *Pee Dee*, during the waning days of the Civil War in 1865; and probably the most significant project was his involvement in the search and recovery

of the Confederate submarine, *H.L. Hunley* from 1994-2000. On the final two-week, 24-hours a day operations to strap the submarine for recovery, Joe worked the night shift, or as it was called by that special group—the Vampire Shift, which often concluded with a morning “night cap” at Dunleavy's Pub on Sullivan's Island. Besides solely working on and in the water, Joe was also amphibious, assisting on land projects, most notably at Santa Elena, the 16th-century Spanish town on Parris Island, and at Cainhoy, an early colonial pottery outside of Charleston, where he worked with Stan South, Chester DePratter, and Jim Legg. Joe's affable nature, resourcefulness, and dependability made him a valued team member during these underwater and terrestrial projects.

To recognize Joe for his many years of service, the MRD recently hosted a retirement party at the Flying Saucer in the Vista, which was attended by family, friends, and colleagues. While a running slideshow spanning Joe's years at SCIAA ran in the background, the honoree and guests mingled and chatted about the past



Figure 3: Joe preparing to dive off Callawassie Island. (SCIAA image)



Figure 5: Joe at helm of SCIAA research vessel in Beaufort River. (SCIAA image)



Figure 6: Joe diving on the *H.L. Hunley* site in 1996. (SCIAA image)



Figure 4: Joe working on magnetometer. (SCIAA image)



Figure 7: Joe with cake at retirement party. (SCIAA image)

Savannah River Archaeology Research

The White Pond Human Paleoecology Project

By Christopher R. Moore

Background

White Pond is a natural lake situated along the western edge of the Upper Coastal Plain in southern Kershaw County, South Carolina. The lake covers nearly 26 hectares and has a generally shallow water depth of less than 2 meters in the deepest portions, with considerably shallower areas along the fringes. Thick mantles of sand and sand dunes surround most of the lake and are underlain by heavily weathered and much older Cretaceous and Tertiary clayey sand deposits. Within the lake itself, peat and organic-rich mud and silt deposits upwards of 6 meters thick, have accumulated since the Last Glacial Maximum (LGM) and possibly earlier. The lake is not a Carolina bay, but rather appears to be an interdune depression formed by the blocking of a drainage head by large Pleistocene sand dunes on the south end of the lake (Figures 1 and 2). Shaping and rounding of the lake have



Figure 2: Panoramic view of White Pond. (Photo by Christopher Moore)

occurred from processes common to those involved in the formation of a Carolina bay, i.e., directional winds on shallow ponded water; (see Moore et al. 2016 for an explanation of Carolina bay formation and evolution).

Early paleoenvironmental reconstructions by Watts (1980) established White Pond as one of the oldest and most complete paleoenvironmental records in the Southeast with a basal core date of at least 22,000 calendar years B.P. A recent study by the U.S. Department of the Interior Southwest Climate Science Center

in Tucson, Arizona and the U.S. Geological Survey (USGS) seeks to provide a much higher resolution core chronology, along with a more detailed analysis of plant pollen and charcoal.

In addition to this work, complementary work is underway to analyze separate sediment cores obtained from the lake to look for other paleoenvironmental indicators and with a specific focus on the Pleistocene-Holocene transition period. This work, entitled The White Pond Human Paleoecology Project (WPHPP) (Figure 3), also includes a terrestrial archaeological component and planned geoarchaeological analyses of both the lake cores and archaeological sediments. Researchers and institutions involved in this work include:

Christopher Moore (Savannah River Archaeological Research Program [SRARP])

Mark Brooks (SRARP-SCIAA, University of South Carolina [USC]—Retired)

Albert Goodyear (South Carolina Institute of Archaeology and Anthropology [SCIAA])

Terry Ferguson (Department of Environmental Studies at Wofford College)

David Mallinson and Sid Mitra (Department of Geosciences at East Carolina University [ECU])

James Feathers (University of Washington, Luminescence Dating Laboratory)

Angie Perrotti (Department of Anthropology at Texas A&M University)

Andrew Ivester (Department of

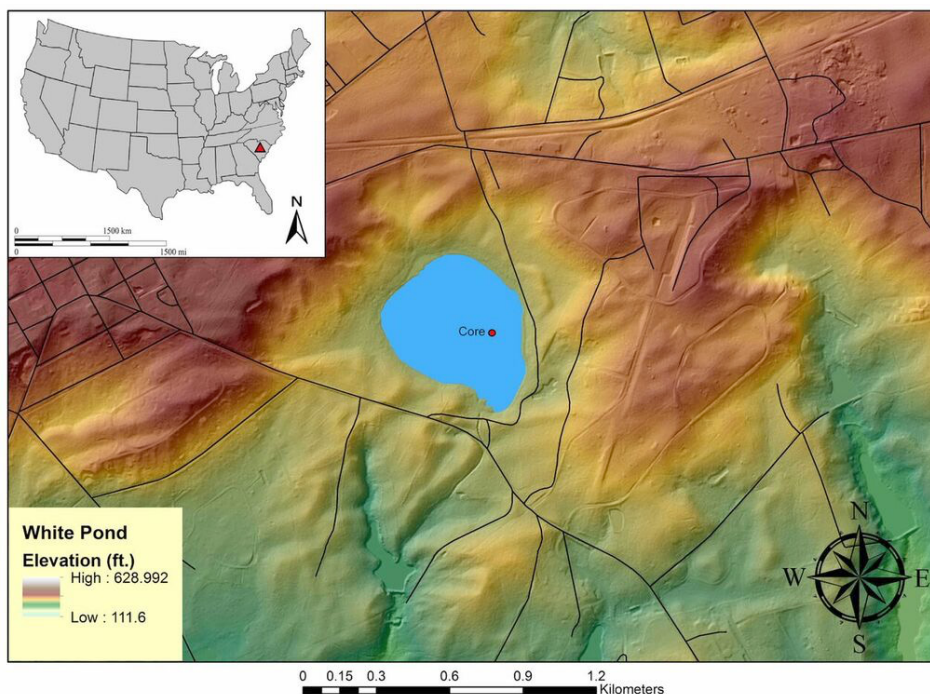


Figure 1: LiDAR elevation map showing White Pond near Elgin, South Carolina and the location of the 2015 and 2016 core samples. (LiDAR image by Christopher Moore)



Figure 3: The White Pond Human Paleoecology Project (WPHPP). (Image by Christopher Moore)

Geosciences at the University of West Georgia)

Josh Kapp (Paleogenomics Laboratory at the University of California, Santa Cruz)

Sean Taylor and Tariq Ghaffar (South Carolina Department of Natural Resources [SCDNR]).

Building on the seminal work of Watts (1980), the goals of the WPHPP are multiple and include efforts to:

- 1) derive the broader geologic context of the age and origin of White Pond and its fringing sediments containing the archaeological record;
- 2) delineate and correlate the lacustrine paleoenvironmental and terrestrial archaeological records through integrated studies of litho- and biostratigraphy, geochronology (OSL and AMS radiocarbon dating), and archaeostratigraphy; and
- 3) conjoin the correlated paleoenvironmental and archaeological records in systemic, human behavioral terms (human paleoecology).

Previous Work

In 2015, several members of the WPHPP group assisted in the recovery of cores for use by the U.S. Department of the

Interior Southwest Climate Science Center in Tucson, Arizona and the USGS (see the July 2015 issue of *Legacy* for a summary of this work). This work is ongoing and will soon provide a high-resolution pollen record for White Pond. A section of core was also collected separately by the WPHPP group to examine the Pleistocene-Holocene boundary documented by Watts in 1980 and represented by a dramatic

transition from organic-rich mud to muddy peat at a depth of ~2.5 meters below the sediment/water interface. The initial work by the WPHPP on this core section focused on producing a high-resolution radiocarbon chronology provided by extremely well preserved aquatic seeds and plant fibers. An initial archaeological excavation also took place in 2015 on the southeast end of the lake. Preliminary findings for this work were also reported in the July 2015 issue of *Legacy*.

In the spring of 2016, a second larger core was collected from the lake with the assistance of Drs. David Mallinson and Sid Mitra from the Department of Geosciences at ECU and Sean Taylor from the SCDNR (Figure 4 and 5). Work on this core continues and includes an analysis of sediment geochemistry to determine if there is evidence of a widespread platinum anomaly at the Younger Dryas onset (ca. 12,800 years ago) similar to those reported by Moore et al. (2017) for archaeological sites across North America. In addition, Angie Perrotti at Texas A&M University is analyzing core samples to look for dung spores (Figure 6) associated with large megaherbivores, such as mammoth and mastodon that may have waded in the waters at White Pond during the last ice age. Spore data revealed from this



Figure 4: Collecting a vibracore from White Pond in 2016. (Photo by Terry Ferguson)



Figure 5: Lower portion of vibracore extracted from White Pond showing the transition from organic-rich mud (lower lighter-colored section) to muddy peat (dark upper section). (Photo by Christopher Moore)

study may indicate the timing of the end-Pleistocene extinction event of more than 35 genera of animals. Also, Josh Kapp at

the Paleogenomics Laboratory at the University of California Santa Cruz is attempting to extract DNA from core samples to determine if particular animal species can be identified from fragments of preserved DNA left in the mud. Additional

radiocarbon dating of the lake core is currently underway to more precisely define the Pleistocene-Holocene transition, to date the timing of the megafauna extinction as indicated by spore abundance, and to determine sediment deposition rates across this boundary. Publication of the results of the core analysis is planned for late 2017 or early 2018.

Recent archaeological investigations in the spring of 2017 utilized local volunteers and SCDNR employees to excavate an area along the south edge of the lake (Figures 7 and 8). At this location, shovel testing



Figure 7: Volunteer excavations at White Pond in May 2017. (Photo by Christopher Moore)

had previously indicated the presence of deeply buried occupations at the base of a sand slope near the lake shoreline and below large Pleistocene dune deposits. Three 2 X 2-meter excavation units were excavated to a depth of 120 centimeters below surface. Concentrations of primarily quartz lithic debris were encountered between 80 and 120 centimeters below surface (cmbs) and included a variety of prehistoric artifacts as well as the *in-situ* discovery of a Late Paleoindian Dalton spear point (~12,000 years old) made of orthoquartzite (Figures 9 and 10). The Dalton was collected without touching or washing and is currently being examined by Dr. Robert Yohe at California State University for blood residue. In addition, we are waiting for results from Beta Analytic, Inc. for a radiocarbon date on charred wood recovered from sediments ~10 to 20 centimeters below the Dalton point. Samples of sediment were collected from a unit wall profile extending below the depth where the Dalton was recovered and will be tested to determine if the Younger Dryas platinum (PT) anomaly reported by Moore et al. (2017) is present in archaeological sediments at White Pond. If the PT anomaly is present at White Pond, it should provide a useful marker for the likely depth of any buried Early Paleoindian Clovis occupations, which should occur chronostratigraphically just before the beginning of the Younger Dryas climate interval. Finally, samples were collected for optically stimulated luminescence (OSL) dating. OSL dating



Figure 6: Photomicrograph of *Sporormiella* (indicated by black arrow) from White Pond core samples. (Photo by Angie Perrot)



Figure 8: Working on stump removal in the middle 2 X 2-meter test unit at White Pond. (Photo by Christopher Moore)

provides an age-estimate for the sand matrix that buried the artifacts (the last exposure of sand grains to sunlight) and will provide an indirect age for the buried artifacts, including the *in-situ* Dalton point.

Future Work

Future work is planned for White Pond, including archaeological survey around the lake to identify the locations and

cultural affiliations of other buried archaeological sites, as well as additional test unit excavations and expansion of the previously excavated area. This work is planned for the spring of 2018 and will be open to volunteers. For those interested in volunteering on this project, please contact Christopher Moore at MOORECR@mailbox.sc.edu or call 803-725-5227. You can also follow updates on the White Pond Human Paleoecology Project Facebook page at <https://www.facebook.com/WPHEP/>.

Acknowledgements

The WPHPP thanks the owners of White Pond for allowing research to be conducted at the site and for financially supporting this ongoing research through generous donations to the USC Educational Foundation. We also thank Bobby Southerlin and Dawn Reid (Archaeological Consultants of the Carolinas, Inc.) as well as Bill Covington for donating funds to the USC Educational Foundation to support archaeological research at White Pond. Sean Taylor and Tariq Ghaffar from SCDNR helped with core extraction and archaeological fieldwork, and SCDNR provided financial support for specialized analyses. Volunteers including John Kolmar, James Gee, Don Horne, Will Padgett, and Darrell Barnes assisted in unit excavations. Pete Stone (SC DHEC—retired) assisted in core preparation and Drs. William Pirkle and

Brad Reinhart from the Department of Biology and Geology at USC Aiken have graciously agreed to store the sediment cores for us, as well as provide space for analysis. Dr. Michael Martinez (School of the Environment, Florida A&M University FSH Science Research Center) also helped with coring.

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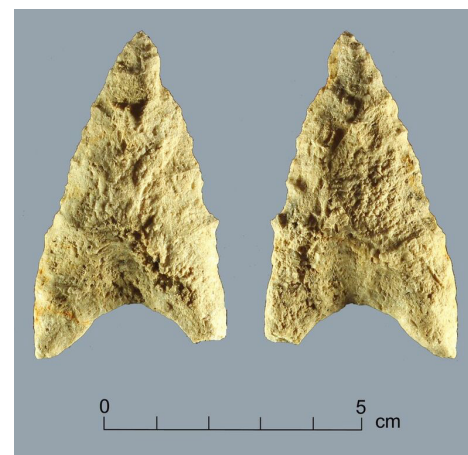


Figure 10: Dalton point found in-situ at White Pond in 2017. (Photo by Christopher Moore)

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Figure 9: Carefully holding a Late Paleoindian Dalton point with a trowel soon after its discovery at White Pond. (Photo by Tariq Ghaffar)

Research Division

The Broad River Archaeological Field School: Season 1

By Andrew A. White

During the spring of 2017, I directed small-scale excavations at a stratified prehistoric site (38FA608) in Fairfield County, South Carolina. The work was conducted in the context of an archaeological field school offered through the Department of Anthropology at the University of South Carolina, supported by SCIAA, and utilizing funds provided by the Archaeological Research Trust (ART) to hire field and laboratory assistants and purchase supplies. The field school was in operation every Friday of the spring semester, with 10 students enrolled and assistance from Jim Legg and DuVal Lawrence. Blog posts describing our work are available on the field school website: <http://broadriverarchaeologicalfieldschool.weebly.com/>.

Preliminary fieldwork conducted at 38FA608 in 2015 and 2016 was focused on cleaning and documentation of a 2.4 meter

(~8 foot) high, 10 meter (~33 foot) long vertical exposure that had been created by the mechanical removal of fill dirt from a small portion of a sandy natural levee parallel to the Broad River. Inspection of the irregular profile revealed stratified, well-preserved cultural deposits including ceramic-bearing strata near the surface, pit features originating at various depths, and a horizontal zone of quartz chipping debris buried about 2 meters (6.5 feet) beneath the surface. A Middle Archaic Guilford point recovered from the slumped portion of the cut indicated that the levee was used as a campsite over a span of at least 5,000 years (White 2015). The deposits were formed by some combination of alluvial processes that produced elevated, sandy surfaces suitable for human occupation since at least the mid-Holocene.

While the profile work showed that a deep series of deposits is present at 38FA608, it was clear that careful

hand excavations would be necessary to understand the cultural and natural stratigraphy at the site and generate information that could be used to answer questions about why prehistoric peoples were repeatedly drawn to this spot along the Broad River and what they did while they were there. Conditions like those at 38FA608—where a high resolution, sequential record of human behavior is protected deep underground—provide a rare opportunity to understand the activities of individuals and small groups deep in South Carolina's past and integrate those data into the larger narrative of Eastern Woodlands prehistory. Data from 38FA608 can potentially be used to address questions of fundamental anthropological significance, helping us understand how the economic, political, and social behaviors of families and small groups in this region articulated with the long-term, large-scale changes that we know took place among prehistoric societies across the Eastern Woodlands.

The 2017 field school excavations at 38FA608 were intended to strike a balance between research, education, and site stabilization goals. Our work focused on three inter-related activities: (1) continuing to straighten and document the exposed vertical wall; (2) exposing and collecting controlled samples of artifacts and deposits to understand the occupational sequence of the levee; and (3) working to stabilize and protect the deposits exposed in the wall. We opened excavation units in two areas of the site, affectionately known as the "upstairs" and "downstairs" (Figure 1).

The "downstairs" work was conducted with the goal of creating a 3 meter-long section of straight wall that would add to the existing profile along the East 1,000 line. Over the course of the semester, Jim Legg and students excavated Units

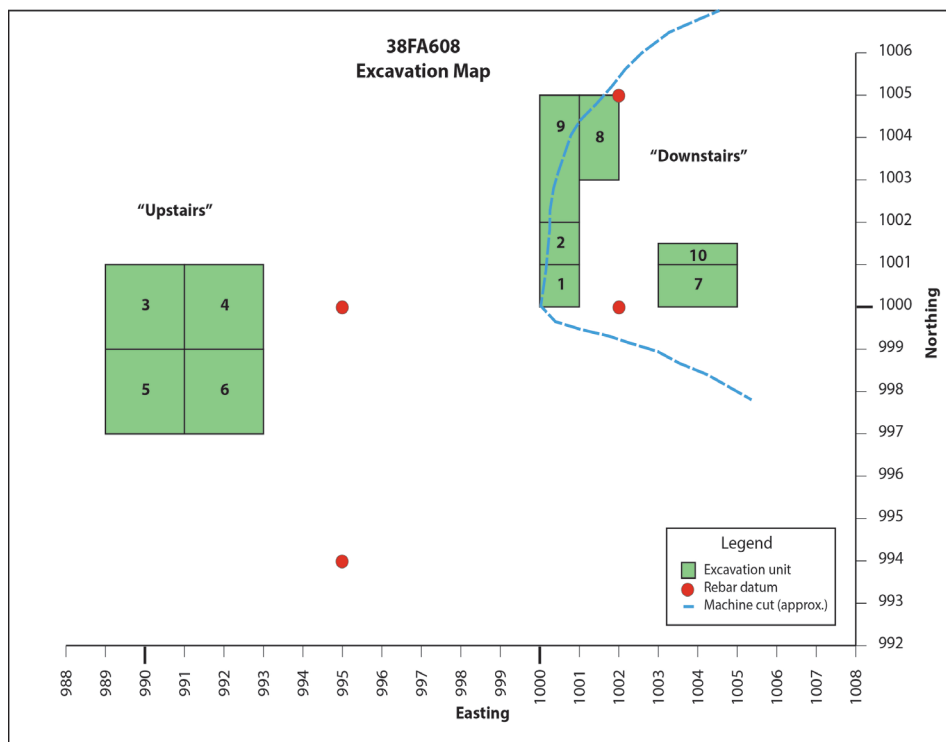


Figure 1: Plan map of excavation units at 38FA608. (Plan map by Andrew A. White)

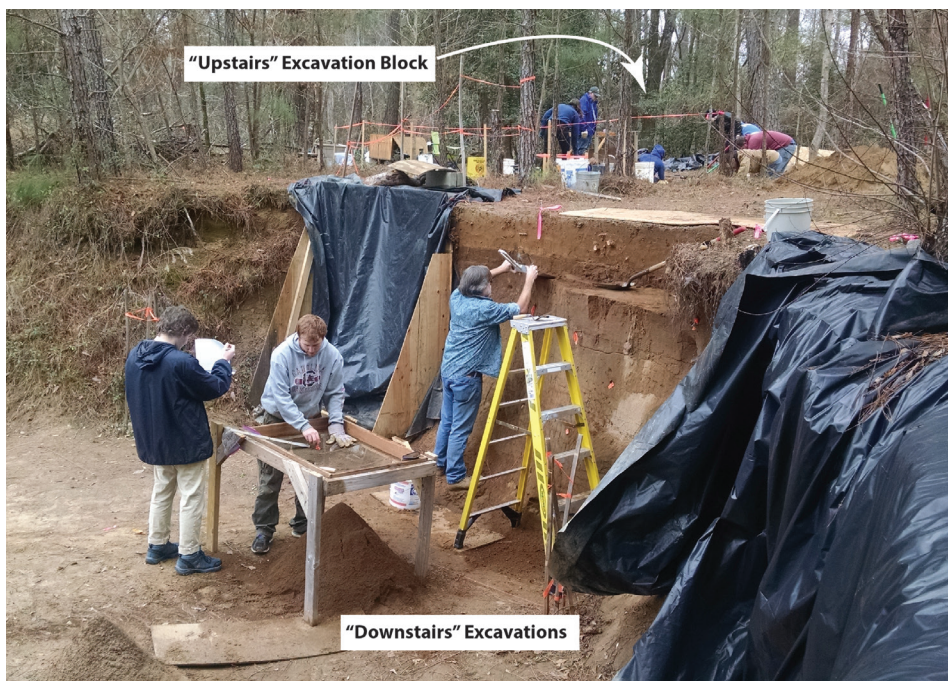


Figure 2: Excavations in progress at 38FA608. Jim Legg, Jacob Butler, and Scott McFall work “downstairs” while the rest of the field school works in the “upstairs” excavation block. (Photo by Andrew A. White)

8 and 9, simultaneously removing the irregularities of the existing machine cut and collecting controlled samples of artifacts all the way down through the deposits (Figure 2). Jim’s excavations gave us the clearest look so far at the stratigraphic sequence preserved within the levee. Despite our best efforts, however, a portion of the straight profile collapsed before we had a chance to fully document it. While the collapse was unfortunate, cleaning and documentation of the damaged wall still provided good information about the stratigraphy of the site and context for the artifacts excavated from Units 8 and 9.

In profile, the deposits in the upper 2.2-meter of the levee can be divided into five main zones (Figure 3). The uppermost zone, Zone 1, is a light-colored plow zone that contains a mixture of late prehistoric lithic and ceramic debris and historic-period items, such as nails and fence wire. Zone 2 is a thinner, darker deposit that may be the remains of a Mississippian-age midden. Plow scars at the interface of Zones 2 and 3, a large rock with plow scars at the base of Zone 2, and truncated cultural features extending from the base of Zone 2 all indicate that at least portions of the deposit have been plowed. It looks as though there are unplowed “pockets”

of Zone 2 in several areas; however: more precisely determining the nature and history of Zones 1 and 2 is a goal for the future.

Beneath the upper zones, Zones 3/4, 5, and 7/8 contain prehistoric deposits in undisturbed contexts. The dark bands (lamellae) that become more pronounced in the profile with depth are time-transgressive features that form over thousands of years as water percolating through the sediment moves clay particles downward through the sandy matrix (Bockheim and Hartemink 2013).

In the “upstairs” portion of the site, we laid out four 2 X 2-meter excavation units (Units 3-6) in a square block. In these units, students first practiced the basic methods and techniques of unit/level excavations by excavating through the upper zone in 10-centimeter levels. We employed a shovel-scraping and piece-plotting methodology within Zone 2, as it was not clear at the time whether it was an undisturbed deposit or one that had been plowed. Zone 2 does appear to have been plowed in the portion of the site within the “upstairs” excavation block.

We continued using shovels to scrape into Zone 3 until it became apparent that we were coming into a relatively dense deposit of prehistoric debris. We switched to trowel excavation at that point, ultimately exposing, mapping, and collecting hundreds of pieces of chipped stone debris and fire-cracked rock in a way that will allow us to reconstruct the human behaviors that produced the deposit (Figure 4). Three Mack points (Figure 5) were plotted within the deposit, indicating a Terminal Archaic age (ca. 4,000 years ago). The blades of two of the points were exhausted, suggesting the points may have been intentionally discarded at the site as prehistoric peoples repaired and refurbished their tools.

At the halt of our block excavations this season, several dark areas surrounded by scatters of fire-cracked rock were visible



Figure 3. Basic sediment zones exposed in profile at 38FA608. (Photo by Andrew A. White)



Figure 4. Block excavations in progress. Orange flagging tape is used to mark the locations of artifacts to be piece-plotted. (Photo by Andrew A. White)

in the unit floors. These stains are almost certainly the tops of cultural features, probably the remains of pits for cooking or processing food. Because intact features preserve a record of a very discrete set of activities (i.e., perhaps being created during the preparation of a single meal), they can potentially provide a great deal of high-resolution information about what people did at this site. Additional damaged features are present at a similar depth in the machine profile wall. Excavating the features in the block and salvaging the features exposed by the irregular machine cut are priorities for future work at the site.

Because the Mack component of 38FA608 is one of only a handful known to be intact in the state (see Bridgman Sweeney 2006), it has the potential to provide significant new information about

this poorly known period of prehistory. As shown by the deep profile, however, this portion of the levee was occupied for at least several thousand years prior to the Mack occupation. The lower zones of the exposed profile probably date to around 6,000-7,000 years ago, and we do not yet know what might be buried further down or farther within the levee. Laboratory processing of the materials recovered

so far is only beginning. It is my hope that we will be able to continue targeted, research-based excavations at 38FA608 as systematic laboratory analysis begins to help us resolve some questions about the site and pose new ones.

I appreciate the hospitality and support of the landowner and his family, as well as generosity of ART and its board, especially Jo Baker who supported the funding of a radiocarbon date. I would also like to acknowledge the hard work of the field school students and thank Jim Legg and DuVal Lawrence for their efforts in making this a successful endeavor. The first season of the Broad River Archaeological Field School set a high bar for the seasons to come (Figure 6).

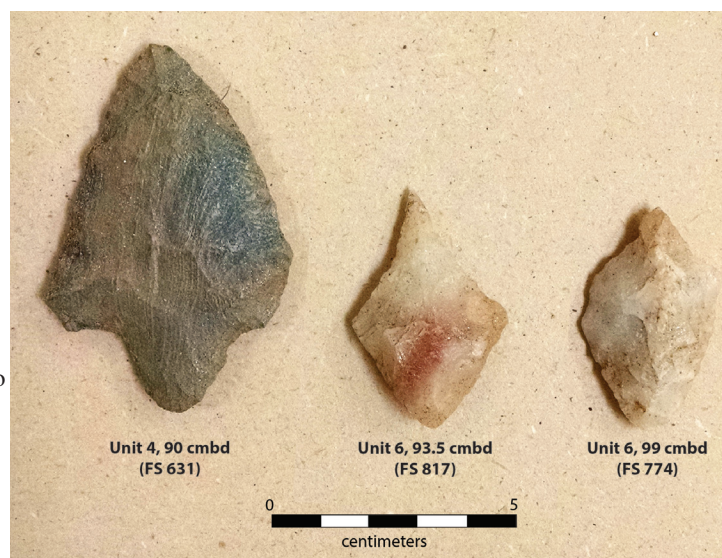


Figure 5. Terminal Archaic Mack points recovered from a buried context in the excavation block (still unwashed). (Photo by Andrew A. White)



Figure 6. Group photo from the 2017 Broad River Archaeological Field School. (Photo courtesy of Andrew A. White)

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South Carolina Archaeology Book

ARCHAEOLOGY IN SOUTH CAROLINA

Exploring the Hidden Heritage of the Palmetto State

Edited by Adam King

Adam King's *Archaeology in South Carolina* contains an overview of the fascinating archaeological research currently ongoing in the Palmetto State and features essays by twenty scholars studying South Carolina's past through archaeological research. The scholarly contributions are enhanced by more than one hundred black-and-white and thirty-eight color images of some of the most important and interesting sites and artifacts found in the state.

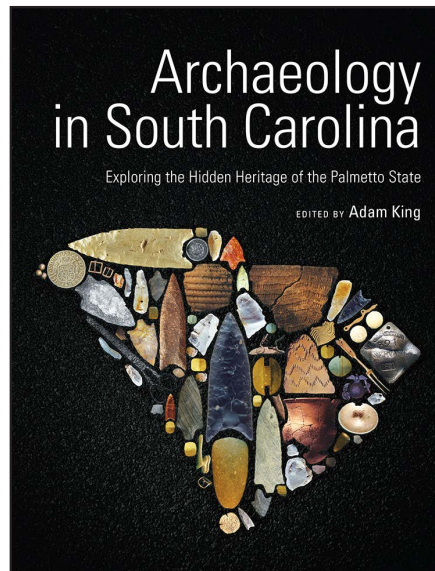
South Carolina has an extraordinarily rich history encompassing some of the first human habitations of North America as well as the lives of people at the dawn of the modern era. King begins the anthology with the basic hows and whys of archaeology and introduces readers to the current issues influencing the field of research. The contributors are all recognized experts from universities, state agencies, and private consulting firms, reflecting the diversity of people and institutions that engage in archaeology.

The volume begins with investigations of some of the earliest Paleo-Indian and Native American cultures that thrived in South Carolina, including work at the Topper Site along the Savannah River. Other essays explore the creation of early communities at the Stallings Island site, the emergence of large and complex Native American polities before the coming of Europeans, the impact of the coming of European settlers on Native American groups along the Savannah River, and the archaeology of the Yamasee, a people whose history is tightly bound to the emerging European society.

The focus then shifts to Euro-Americans with an examination of a long-term project seeking to understand George Galphin's trading post established on the Savannah River in the eighteenth century.

The volume concludes with the recollections of a life spent in the field by South Carolina's preeminent historical archaeologist Stanley South, now retired from the South Carolina Institute of Archaeology and Anthropology at the University of South Carolina.

March 2015, 304 pages, 38 color and 103 b&w illus.



Adam King is a research associate professor in the South Carolina Institute of Archaeology and Anthropology and special projects archaeologist for the Savannah River Archaeological Research Program at the University of South Carolina. King has conducted research in the Southeast since 1987 and specializes in the Mississippian period and the political economies of chiefdoms. He is the author of *Etowah: The Political History of a Chiefdom Capital*.

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